



June 22, 2022

Board of Public Works & Safety
City of Lafayette
20 North 6th Street
Lafayette, IN 47901

Dear Board Members:

You have before you a Contract with Greeley and Hansen LLC regarding Gas-Powered Aeration Blower Pilot Assistance and Solar Field at WWTP. The wastewater treatment plant (WWTP) has large electric aeration blowers, ranging from 650 to 1,000 horsepower, that were installed as part of the 2000 Plant Upgrade and Expansion and are nearing the end of their useful life. In consideration of replacement of the blower(s), alternatives to electric-powered blowers were considered to promote operational resiliency. In addition to the blower, Lafayette Renew plans to install a solar field at the wastewater treatment plant. This solar field will offset peak and base electrical demand.

The scope of this Contract includes the following:

- Facilitation of a pilot of the gas-powered blower at the WWTP
- Right sizing the solar field, assisting with preparing a request for qualifications (RFQ) for a specialized solar energy provider, and assisting with construction services during installation of the solar field.

Greeley and Hansen LLC will perform this work for a not-to-exceed amount of \$157,900. This contract was reviewed by the City Attorney and I recommend it for your approval.

Respectfully,

Brad W. Talley
Superintendent
Lafayette Renew



AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

between

CITY OF LAFAYETTE, INDIANA

and

GREELEY AND HANSEN LLC

Article I. PARTIES AND PROJECT

This AGREEMENT is made effective on the _____ day of _____ in the year 2022 between the City of Lafayette, Indiana, hereinafter referred to as CITY, and Greeley and Hansen LLC, an Illinois limited liability company, with its principal office at 100 South Wacker Drive, Chicago, Illinois 60606-4004, and a regional office at 7820 Innovation Boulevard, Suite 150, Indianapolis, Indiana 46278-2728, hereinafter referred to as ENGINEER, for professional engineering services in connection with the Gas-Powered Aeration Blower Pilot Assistance and Solar Field at WWTP Project, the PROJECT.

Article II. ENGINEER'S SERVICES

ENGINEER shall provide appropriate professional engineering services as required to complete the scope of services as set forth hereinafter, and shall perform such services in conformance with the ordinary standards of care and skill of the engineering profession.

A. Basic Services

The scope of the basic services for the PROJECT are set forth in Exhibit A attached hereto and made a part of this AGREEMENT. ENGINEER shall not perform services beyond the scope as defined in Exhibit A without the prior written authorization of CITY.

B. Additional Services

ENGINEER may submit proposals for additional professional engineering services in connection with the PROJECT. Each proposal submitted shall detail the: (1) scope of additional services, (2) period of services, and (3) method and amount of compensation.

CITY shall provide written acceptance and authorization to ENGINEER prior to the commencement of work on any proposed additional services. Upon receipt by ENGINEER of written acceptance and authorization by CITY, each proposal for additional services in connection with the PROJECT shall become part of this AGREEMENT and shall be governed by the terms and conditions contained herein.

C. Period of Services

Upon receipt of CITY'S written notice to proceed, ENGINEER agrees that the basic services as described in Exhibit A will be completed according to the schedule provided in Exhibit C.

The period of services will begin upon the date of CITY'S written notice to proceed. ENGINEER shall not, however, be responsible for timely completion of basic services as agreed to herein if completion is delayed by the failure of CITY to furnish the services provided for under Article IV., hereof, in a timely manner, or for other reasons beyond the control of the ENGINEER.

ENGINEER further agrees that additional services will be substantially complete within the period specified in each accepted and authorized proposal for additional services, unless reasons for delay in completion are beyond the control of ENGINEER.

If ENGINEER'S basic services or any accepted and authorized additional services are delayed or suspended in whole or in part by the CITY for more than ninety days beyond the scheduled completion date for said basic or additional services for reasons beyond ENGINEER'S control, compensation for the delayed services, as provided in Article III. hereunder, shall be subject to renegotiation upon the written request of ENGINEER. However, such request must be submitted by ENGINEER to the CITY prior to the completion of the delayed services.

Article III. ENGINEER'S COMPENSATION

ENGINEER shall perform professional engineering services as provided in Article II. of this AGREEMENT for which CITY shall compensate ENGINEER as follows:

A. Basic Services**1. Personnel Services**

ENGINEER shall be compensated for personnel services on the basis of actual annual average hourly rates paid to personnel assigned to the PROJECT for each hour of services rendered times a 3.2 factor to cover overhead and profit. Such rates shall be computed as actual annual base salary, in effect at the time the services are rendered, divided by 1,950 hours. Personnel services rates shall include applicable required overtime premium for covered employees.

2. Subconsultants and Other Professional Associates

CITY shall pay ENGINEER for the services of subconsultants and other professional associates at their invoiced fees to ENGINEER plus 10 percent.

3. Reimbursable Direct Costs

CITY shall pay ENGINEER the actual cost of any direct reimbursable expenses incurred in connection with performing the services.

B. Additional Services

Unless otherwise provided for in any accepted and authorized proposal for additional services, such services shall be compensated for on the same basis as provided for in Paragraph III. A., above, for basic services.

C. Total Compensation

Total compensation to ENGINEER for basic services under this AGREEMENT shall include full reimbursement for personnel services, subconsultants and other professional associates and reimbursable direct costs incurred in performing basic services, as described in

Paragraph III. A. It is agreed that the total compensation to ENGINEER for performing basic services will not exceed \$157,900, as set forth in Exhibit B, without prior approval of CITY. If at any time ENGINEER has reason to believe that the total cost to be incurred in the performance of the basic services will be greater than the total estimated cost for such services, ENGINEER shall notify the CITY in writing to that effect giving the detailed reasons for the change and revised estimate of such total cost for the performance of basic services.

The provisions of this Article III. C. shall also apply to each accepted and authorized proposal for additional services in connection with the PROJECT. However, the term "basic services", as used in this Article III. C., shall mean "additional services" and the terms "Exhibits A" and "Exhibit B" as used in this Article III. C. shall mean "the accepted and authorized proposal for additional services". The estimated compensation for any additional services, and the completion date beyond which these amounts are subject to renegotiation, shall be as specified in each such authorized proposal.

D. Terminated Services

If this AGREEMENT is terminated, ENGINEER shall be paid for services performed to the effective date of termination as follows:

1. For personnel services, the hours of services rendered at the established rates, to the effective date of termination times the factors established herein.
2. For services of subconsultants and other professional associates, their invoiced fees to ENGINEER, for services to the effective date of termination plus 10 percent.
3. For reimbursable direct costs, the actual cost of direct reimbursable expenses incurred to the effective date of termination.

E. Conditions of Payment

1. Progress payments shall be made in proportion to services rendered and expenses incurred as indicated within this AGREEMENT and shall be due and owing within thirty days of ENGINEER'S submittal of his progress payment invoices.
2. If CITY fails to make payments due ENGINEER within forty-five days of the submittal of any progress payment invoice, ENGINEER may, after giving fifteen days written notice to CITY, suspend services under this AGREEMENT.
3. No deduction shall be made from ENGINEER'S compensation on account of penalty, liquidated damages or other sums withheld from payments to construction contractors.
4. If the PROJECT is delayed, or if ENGINEER'S services for the PROJECT are delayed or suspended for more than ninety days for reasons beyond ENGINEER'S control, ENGINEER may, after giving fifteen days written notice to CITY, request renegotiation of compensation under Article II. C. or may terminate this AGREEMENT.

Article IV. CITY'S RESPONSIBILITIES

The CITY shall, as required:

- A. Provide all criteria and full information as to CITY'S requirements for the PROJECT, and furnish copies of all design and construction standards which the CITY will require to be included in the drawings and specifications.
- B. Assist ENGINEER by placing at ENGINEER'S disposal all available information pertinent to the PROJECT including CITY maps and plats, previous reports, drawings, specifications and any other data relative to the design or construction of the PROJECT.

- C. Furnish to ENGINEER property and land use data pertaining to the PROJECT available to the CITY including, but not limited to, property, boundary, easement, right-of-way, topographic and utility surveys; property descriptions; zoning, deed and other land use restrictions; and other related data.
- D. Provide legal, insurance and financial consulting services necessary for the PROJECT, and such accounting and auditing services as the CITY may require.
- E. Furnish permits and approvals from all governmental authorities having jurisdiction over the PROJECT and from others as may be necessary for completion of the PROJECT.
- F. Furnish above record information, property and land use data, and services at CITY'S expense in such manner that ENGINEER may rely upon them in the performance of services under this AGREEMENT.
- G. Furnish any laboratory analyses that may be required in connection with the PROJECT.
- H. Guarantee full and free access to ENGINEER to enter upon all public and private property required for the performance of ENGINEER'S services under this AGREEMENT.
- I. Designate in writing a person to act as CITY'S representative with respect to the services to be performed under this AGREEMENT. Such person shall have complete authority to transmit instructions, receive information, interpret and define CITY'S policies and decisions with respect to materials, equipment, elements and systems pertinent to ENGINEER'S services.
- J. Coordinate, consolidate, reconcile and bring congruence to differing views in the CITY'S organization to form single firm responses stating the CITY'S position on matters requiring resolution during performance of ENGINEER'S services. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by ENGINEER

and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of ENGINEER. Render such decisions in a consolidated form reconciling differing views into an unambiguous single firm response to each matter requiring resolution.

- K. Provide ENGINEER with prompt written notice of any defect or suspected defect in ENGINEER'S performance of any services rendered pursuant to this AGREEMENT or relating to the PROJECT.
- L. In any agreement entered into between the CITY and other contractors for the PROJECT in which such contractors and their subcontractors agree to indemnify, provide insurance coverage to, and/or name as additional insured, the ENGINEER, its subconsultants, professional associates, and each of their officers, principals, partners and employees to the same extent as to the CITY. Furthermore, the CITY will provide ENGINEER with certificates of insurance from each such contractor or subcontractor.
- M. Give prompt written notice to ENGINEER whenever the CITY observes or otherwise becomes aware of any development that affects the scope or timing of ENGINEER'S services, or any defect in the work of construction contractors.
- N. Compensate ENGINEER in accordance with the provisions of Article III.

Article V. GENERAL PROVISIONS

A. Ownership of Documents

All reports, schedules, drawings, specifications and other products of services of ENGINEER for this PROJECT are instruments of service for this PROJECT only and shall remain the property of ENGINEER until the CITY has compensated ENGINEER in full for services rendered pursuant to the AGREEMENT. Upon final payment for each phase of Basic Services and for each separately accepted and authorized proposal for additional

services, ownership of the products or instruments of service for said phase or additional services authorized shall be vested in the CITY. ENGINEER, however, may retain record copies of all such instruments of service and may use such for ENGINEER'S exclusive purposes.

The ENGINEER'S instruments of service have been prepared for very specific purposes and the degree of accuracy and detail of the instruments of service are consistent with those purposes but they may not be useful for other purposes. Furthermore, misapplication of the ENGINEER'S instruments of service can cause occurrences that potentially have life/safety and financial consequences. The ENGINEER'S instruments of service are not intended or represented to be suitable for use by the CITY or by others acting for the CITY for other purposes on this PROJECT or on extensions of this PROJECT or on any other project without written verification, adaptation or completion by ENGINEER and, when applicable, associated compensation to ENGINEER.

Any changes or modifications to the instruments of service of ENGINEER which are introduced by anyone other than ENGINEER may have adverse consequences. Therefore, the change or modification of ENGINEER'S instruments of service by the CITY or by others acting for the CITY shall be at the CITY's sole risk and the CITY agrees, to the fullest extent permitted by law, to defend, indemnify and hold harmless ENGINEER from all claims, damages, and expenses, including attorney's fees, arising out of such change or modification.

Use of the instruments of service of ENGINEER on extensions of this PROJECT, or on any other project by the CITY or by others acting for the CITY, without verification or adaptation by ENGINEER and appropriate compensation therefore, shall be at the CITY'S sole risk and the CITY agrees, to the fullest extent permitted by law, to defend, indemnify and hold harmless ENGINEER from all claims, damages, and expenses, including attorney's fees, arising out of such use of ENGINEER'S instruments of service for this PROJECT.

B. Data on Electronic Media

Data delivered on electronic media are considered part of the ENGINEER'S instruments of service and, therefore, Article V.A. above applies to documents delivered on electronic media.

The form of ENGINEER'S drawings, specifications, reports, data or other information that may be relied upon are those which 1) are set forth on paper (also known as hard copies) and 2) are designated as final. Files in electronic media format of text, data, graphics, or other types are furnished only for convenience, not reliance by the CITY. Any conclusion or information obtained or derived from such electronic files will be at the CITY's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

Because files stored in electronic media format can contain irregularities, deteriorate or be modified inadvertently or otherwise without authorization of the ENGINEER, the transmitted electronic files should be examined by the CITY within 60 calendar days of receipt, after which time the CITY shall be deemed to have accepted the files thus transmitted. Any transmittal deficiencies detected within the 60-day acceptance period will be corrected by ENGINEER. Deficiency corrections requested after the acceptance period will be considered "additional services." ENGINEER is not responsible for irregularities, deterioration or modifications occurring or detected after the 60 calendar-day acceptance period.

ENGINEER 1) makes no representations as to the long-term usability or readability of the electronic files and 2) cannot be depended upon to maintain copies of the electronic files after the 60 calendar-day acceptance period. The documents will be in the software listed below designed for operation on a PC compatible computer under the associated operating system as listed below:

Type of Document	Software	Operating System
Word Processed Text	MS Word 365	Windows
Spreadsheets	MS Excel 365	Windows
CADD Drawings	Civil 3D	Windows

The ENGINEER makes no warranty as to the compatibility of electronic files beyond those versions. However, the ENGINEER reserves the right to submit documents in versions newer than those shown above.

ENGINEER makes no representations as to the compatibility, usability, or readability of the electronic files resulting from the use of software application packages, operating systems, or computer hardware (e.g. monitors, graphic cards and plotters) differing from those used by ENGINEER and its subconsultants. Also, the use of software application packages, operating systems and computer hardware different from those used by ENGINEER and its subconsultants may introduce errors and irregularities. Such occurrences are not the responsibility of ENGINEER and its subconsultants.

C. Successors and Assigns

1. The CITY and ENGINEER each binds himself and his partners, successors, executors, administrators, assigns and legal representatives to the other party to this AGREEMENT and to the partners, successors, executors, administrators, assigns and legal representatives of such other party, in respect to all covenants, agreements and obligations of this AGREEMENT.
2. Neither the CITY nor ENGINEER shall assign or transfer any rights under or interest in this AGREEMENT without the written consent of the other, except as stated in Article V. C. 1. and to the extent that the effect of this limitation may be restricted by

law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this AGREEMENT. Nothing contained in this paragraph shall prevent ENGINEER from employing such independent subconsultants and associates as may be deemed appropriate to assist in the performance of services hereunder.

D. Changes in Scope and Revisions

The general category "additional services", referred to in Article II. B. may include services due to changes in the scope of the PROJECT, including, but not limited to, changes in size, complexity, schedule or character of the services and also may include revisions to instruments of service previously approved by the CITY or other revisions due to causes beyond the control of ENGINEER. All changes in scope and revisions shall require the written acceptance and authorization of the CITY prior to commencement of work, as provided in Article II. B.

This AGREEMENT takes into account the professional engineering and architectural signing and sealing requirements that are applicable as of the date of this AGREEMENT. Any changes to those requirements during the performance of the services associated with this AGREEMENT which cause revisions to the scope of the ENGINEER'S services or to the ENGINEER'S instruments of services shall be considered "additional services".

Proposals for services pursuant to changes in scope or revisions shall, upon CITY'S acceptance and authorization, become part of this AGREEMENT and shall be governed by the terms and conditions contained herein.

E. Extent of AGREEMENT

This AGREEMENT represents the entire understanding and agreement between the CITY and ENGINEER for professional engineering services pertaining to the PROJECT as described in Article II. and supersedes all prior negotiations, representations or agreements,

either written or oral. This AGREEMENT may be amended only by written instrument signed by both the CITY and ENGINEER.

F. No Waiver

Failure of the ENGINEER or the CITY to insist upon strict and punctual performance of any terms or conditions of this AGREEMENT shall not be construed to constitute a waiver of, or estoppel against, asserting the rights to require such performance. Neither shall a waiver nor an estoppel in one instance constitute a waiver or an estoppel with respect to a later default, whether similar or dissimilar in nature.

G. Severability

If any part of this AGREEMENT is determined by a court to be in conflict with statute or constitution or to be unlawful for any reason, the parties intend that the remaining provisions of this AGREEMENT shall remain in full force and effect unless the stricken provision leaves the remaining AGREEMENT unenforceable.

H. Governing Law

This AGREEMENT shall be governed by the laws of the State of Indiana.

I. Subconsultants

During the performance of the AGREEMENT, ENGINEER may engage such additional subconsultants or professional associates as may be appropriate for the timely completion of the services or to meet applicable requirements. The engagement of any subconsultants or professional associates shall be subject to the prior approval of the CITY.

J. Insurance

The ENGINEER shall at its own expense maintain in effect during the term of this contract the following insurance with limits as shown or greater:

1. General Liability (including automobile) with a combined single limit of \$1,000,000. The CITY shall be named as an Additional Insured to cover the

ENGINEER's indemnification obligation under this Agreement and be given a 30 day notice of cancellation, non-renewal or reduction in coverage. ENGINEER'S insurance shall be written on a "primary" basis and the CITY'S insurance program shall be in excess of all of ENGINEER'S available coverage.

2. Worker's Compensation at the statutory limit. Workers Compensation shall include a Waiver of Subrogation endorsement in favor of CITY.
3. Professional Liability for protection against claims arising out of performance of professional services caused by negligent error, omission or act in the amount of \$2,000,000.

The ENGINEER shall provide to the CITY Certificates of Insurance indicating the aforesaid coverage.

K. ENGINEER'S Estimates of Cost and Standard of Care

Since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, ENGINEER'S estimates of project and construction costs are to be made on the basis of its experience and qualifications and represent its best judgment as an experienced and qualified professional engineering firm, familiar with the construction industry; but ENGINEER cannot and does not guarantee that proposals, bids or actual project or construction costs will not vary from ENGINEER'S estimates of cost.

Notwithstanding any other provisions in this AGREEMENT to the contrary, nothing herein contained shall be construed as:

1. Constituting a guarantee, warranty or assurance, either express or implied, that the engineering services will yield or accomplish a perfect outcome for the PROJECT; or
2. Obligating the ENGINEER to exercise professional skill and judgment different from that which can be reasonably expected from other engineers under like circumstances; or
3. An assumption by the ENGINEER of liability greater than or differing from those explicit in this AGREEMENT, or
4. An assumption by the ENGINEER of the liabilities of any other party.
5. An assumption by the ENGINEER for the construction means, methods, techniques, procedures, or safety precautions and programs in connection with the Project.

L. Consequential Damages

Notwithstanding anything to the contrary in this AGREEMENT, neither the CITY nor the ENGINEER shall have the right of recourse to the other party for any consequential damages incurred due to the fault of the CITY or ENGINEER, their employees, agents or subcontractors, irrespective of any forewarning of the potential for such damages arising.

M. Termination

This AGREEMENT may be terminated by the CITY without cause on thirty days written notice. If the PROJECT is delayed, or if ENGINEER'S services for the PROJECT are delayed or suspended for more than ninety days for reasons beyond ENGINEER'S control,

ENGINEER may request renegotiation of compensation in accordance with the provisions of Articles II. and III. or, after giving fifteen days written notice, terminate this AGREEMENT with cause. In the event of substantial failure to perform in accordance with the terms of this AGREEMENT, the party not at fault may terminate the AGREEMENT with cause on ten days written notice. If this AGREEMENT is terminated, ENGINEER shall be compensated for services performed to the effective date of termination in accordance with the provisions of Article III. of this AGREEMENT. Within sixty days following the date of receipt of the termination notice, and following receipt of compensation for services to date of termination, ENGINEER shall submit to the CITY copies of all reports, drawings, specifications and other products or instruments of service prepared prior to termination.

N. Remedies

Except as may be otherwise provided in this AGREEMENT, all claims, counter-claims, disputes and other matters in question between the CITY and ENGINEER arising out of or relating to this AGREEMENT or the breach thereof will be decided by arbitration if the PARTIES mutually agree or in an Indiana court of competent jurisdiction.

O. Non-Discrimination and Equal Employment

ENGINEER agrees:

1. That in the hiring of employees for the performance of work under this contract or any Subconsultant hereunder, no ENGINEER, or Subconsultant, nor any person acting on behalf of such ENGINEER or Subconsultant, shall, by reason of race, religion, color, sex, national origin or ancestry, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment relates.

2. That no ENGINEER, Subconsultant, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry.
3. That the CITY may deduct from the amount payable to the ENGINEER a penalty of five dollars (\$5.00) for each person for each calendar day during which such person was found to have been discriminated against or intimidated in violation of the provisions of the contract.
4. If there is found to be a second or any subsequent violation of the terms or conditions of this section, then this contract may be cancelled or terminated by CITY and all money due or to become due hereunder will be forfeited.

P. Engaging in activities with Iran

By signing this Contract, ENGINEER certifies that it is not engaged in investment activities in the county of Iran as set forth in IC 5-22-16.5.

Q. E-Verify

ENGINEER shall comply with E-Verify Program as follows:

1. Pursuant to IC 22-5-1.7, ENGINEER shall enroll in and verify the work eligibility status of all newly hired employees of ENGINEER through the E-Verify Program ("Program"). ENGINEER is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists.
2. ENGINEER and its Subconsultants shall not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that ENGINEER or its Subconsultants subsequently learns is an unauthorized alien. If ENGINEER violates this Section, the CITY shall require ENGINEER to remedy the violation no later than thirty (30) days after the CITY notifies ENGINEER. If ENGINEER fails

to remedy the violation within the thirty (30) day period, the CITY shall terminate the contract for breach of contract. If the CITY terminates the contract, ENGINEER shall, in addition to any other contractual remedies, be liable to the CITY for actual damages. There is a rebuttable presumption that ENGINEER did not knowingly employ an unauthorized alien if ENGINEER verified the work eligibility status of the employee through the Program.

3. If ENGINEER employs or contracts with an unauthorized alien but the CITY determines that terminating the contract would be detrimental to the public interest or public property, the CITY may allow the contract to remain in effect until the CITY procures a new Engineer.
4. ENGINEER shall, prior to performing any work, require each Subconsultant to certify to ENGINEER that the Subconsultant does not knowingly employ or contract with an unauthorized alien and has enrolled in the Program. ENGINEER shall maintain on file a certification from each Subconsultant throughout the duration of the Project. If ENGINEER determines that a Subconsultant is in violation of this Section, ENGINEER may terminate its contract with the Subconsultant for such violation. Such termination may not be considered a breach of contract by ENGINEER or the Subconsultant.
5. By its signature below, ENGINEER swears or affirms that it i) has enrolled and is participating in the E-Verify program, ii) has provided documentation to the CITY that it has enrolled and is participating in the E-Verify program, and iii) does not knowingly employ an unauthorized alien.

R. Indemnification

CITY and ENGINEER each agree to indemnify and hold the other harmless, and their respective officers, employees, agents and representatives, from and against liability for all claims, losses, damages, and expenses, including reasonable attorney fees, to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's

negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of the CITY and ENGINEER, they shall be borne by each party in proportion to its negligence.

S. Notices

Any notices required hereunder or by law may be directed to the parties at the following addresses:

To ENGINEER:

Joseph Teusch, PE
Office Director
Greeley and Hansen LLC
7820 Innovation Blvd, Suite 150
Indianapolis, IN 46278-2728

To CITY:

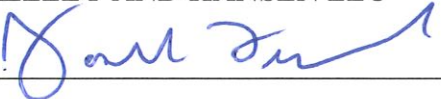
Honorable Tony Roswarski
Mayor
City of Lafayette
20 North 6th Street
Lafayette, IN 47901-1412

All notices shall be deemed to be given when deposited with the United States Postal Service for first class mail delivery.

Article VI. APPROVAL

In WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed by their duly authorized officers and partners and is made effective the day and year first above written.

GREELEY AND HANSEN LLC



Joseph Teusch, PE

Authorized Representative

ATTEST:



Tim Healy, PE

Associate

CITY OF LAFAYETTE, INDIANA
BOARD OF PUBLIC WORKS AND SAFETY

Gary Henriott

President

Cindy Murray

Member

Norm Childress

Member

Ron Shriner

Member

Amy Moulton

Member

Mindy Miller Riehle

1st Deputy Clerk

ATTEST:

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

between

CITY OF LAFAYETTE

and

GREELEY AND HANSEN LLC

SCOPE OF ENGINEERING SERVICES

**GAS-POWERED AERATION BLOWER PILOT ASSISTANCE AND
SOLAR FIELD AT WWTP**

The wastewater treatment plant (WWTP) has large electric aeration blowers, ranging from 650 to 1,000 horsepower, that provide air and mixing to the aeration tanks. The blowers installed as part of the 2000 Plant Upgrade and Expansion are nearing the end their useful life, and in consideration of replacement of the blower(s), alternatives to electric-powered blowers were considered to promote operational resiliency. Aeration blowers are critical to plant operations and make up a large percentage of the electrical use at the WWTP, so a gas-powered blower would reduce electrical demand (both peak and base demand), provide a means to keep the plant in operation in the case of an electrical power failure and provide a means to beneficially use excess digester gas.

Lafayette Renew intends to pilot a dual-fuel gas-powered blower, that has the option to run on either natural gas, or digester gas that runs through a gas conditioning skid. This scope of services will include facilitation of a pilot of the gas-powered blower at the WWTP. For the pilot testing, only natural gas will be hooked up to the dual-fuel blower, due to the complex nature of the digester gas conditioning skid and corresponding capital that would be required.

Furthermore, Lafayette Renew plans to further build upon their history of sustainable practices by installing a solar field on WWTP property that will offset peak and base electrical demand, thus reducing electrical energy costs for the facility. The scope of services will include right sizing the solar field, assisting with preparing a request for qualifications (RFQ) for a specialized solar energy provider, and assisting with construction services during the installation of the solar field.

The scope of engineering services includes the following tasks:

1.0 TASK 1 - GENERAL

- 1.1 Project Management.** Prepare project performance plan including task assignments, setting up project files, project invoicing and scope and budget monitoring. Provide design coordination and management of support disciplines and geotechnical subconsultant.

Deliverables associated with this task include preparation of monthly invoices.

2.0 TASK 2 – GAS-POWERED AERATION BLOWER PILOT ASSISTANCE

2.1 **Pilot Blower Start-Up Assistance.** Facilitate pilot of natural gas-powered aeration blowers. Coordinate with pilot blower manufacturer on the following items:

2.1.1 **Process.** Confirm size of gas-powered aeration blower is sufficient such that two (2) blowers can provide required process air and mixing for plant loading. Summarize design criteria for the pilot blower, including the following:

- Summarize aeration loadings, including:
 - Wastewater flow
 - CBOD, including volumetric loading
 - Hydraulic detention time
 - BOD Oxygen Demand
 - Ammonia Oxygen Demand
- Calculate anticipated natural gas usage of pilot blower.
 - Coordinate with natural gas conveyance provider to confirm volume and pressure of gas available.
 - Coordinate with City so that future prepurchase quantities of natural gas are reflective of this pilot project.
- Define required equipment size for the pilot blower, including:
 - Range of pressure required
 - Range of airflow required
 - Air flow control valves and operators
- Coordinate the routing of process air piping and natural gas piping with blower manufacturer
- Provide detail for concrete slab to support blowers
- Description of operational strategy for situations that require multiple blowers to be in operation

2.1.2 **Electrical.** Summarize electrical modifications that will be required for pilot blower, including the following:

- Identify 120 Volt power feed required for pilot blower

2.1.3 **Instrumentation and Controls.** Summarize any upgrades or changes to controls required for pilot blower.

- Addition of telecommunication for remote monitoring via the Lafayette Renew Supervisory Control and Data Acquisition (SCADA) System

Deliverables associated with this task include preparation of process, electrical, and instrumentation and controls design criteria in a technical memorandum.

2.2 **Pilot Blower System Performance Documentation.** Document data gathered throughout the duration of the pilot, including the following:

- 2.2.1 **Natural Gas Usage.** Summarize natural gas usage throughout the pilot, comparing with WWTP natural gas usage and corresponding energy bills for the past three (3) years.
- 2.2.2 **Heat Recovery.** Summarize benefits of heat recovery from blower, including the value of the waste heat generated by the blower throughout the duration of the pilot. Determine preliminary viability of capturing the waste heat and connecting into the WWTP hot water loop.
- 2.2.3 **System Performance.** Document system performance, including utility cost savings, WWTP performance (permit compliance, effluent wastewater characteristics such as dissolved oxygen, effluent ammonia and CBOD, and equipment reliability).

Deliverables associated with this task include preparation of Gas-Powered Aeration Blower Pilot Report.

- 2.3 **Progress Meetings.** Conduct up to three (3) progress meetings to review technical aspects of the project. Initial meeting will review design criteria technical memorandum, second meeting will take place prior to installation and third to review performance report at the end of the pilot. Meetings will be used to facilitate decision making and discuss and confirm finding of memoranda and blower performance reports. Provide meeting agenda and discussion materials prior to the meeting. Prepare and distribute progress meeting notes within one week of each meeting. The Project Manager, Project Director and Engineer will attend each meeting.

Deliverables associated with this task include meeting agendas, discussion materials and meeting notes from progress meetings. Deliverables will be distributed as PDFs with agendas distributed five (5) business days before meetings and meeting notes distributed within five (5) business days after meetings. If no comments are received within five (5) business days, then draft notes are considered final.

3.0 SOLAR FIELD AT WWTP DESIGN AND CONSTRUCTION SERVICES

- 3.1 **Sizing of Solar Field.** Determine the optimal size of the proposed solar field. The proposed size (or range of size) will be governed by the physical space available, the energy used by the WWTP, and the 1 Mega-Watt energy generation cap (per Duke Energy).

The regulatory arrangement is such that if Renew would generate more energy than is used at the WWTP over an annual basis the economic benefit is significantly less, so it is important to size the solar field so that all of the energy generated can be used (over an annual average) by the WWTP.

This analysis will establish a baseline of electrical use at the WWTP over the past three-year period. The potential impact of gas-powered blower on future electrical energy use will also be quantified. The energy usage will then be compared to the physical space available and the 1 MW cap on energy production to provide a recommended solar field sizing.

EXHIBIT A

Deliverables associated with this task include technical memorandum documenting recommended solar field size.

3.2 Preparation of Request for Qualifications (RFQ) for Guaranteed Savings Contract (GSC) Solar Provider.

The RFQ process will be two phased with an initial short listing of qualified providers based on response to the RFQ and a second phase where the short-listed providers provide a price to perform the work.

3.2.1 Performance Based Specification and Drawings Prepare Construction Specifications and Drawings to use in the solicitation of a guaranteed maximum price (GMP) proposal.

The conceptual level drawings will identify:

- Where and how to connect the solar field into the WWTP (site plan and one-line diagram),
- Document how standby power interfaces with the solar field (one-line diagram and schematics)
- Grading and site restoration needs

The performance-based specifications will define the system requirements as outlined below. Engineers Joint Contract Documents Committee (EJCDC) General Conditions will be used. Standard Construction Specifications Institute (CSI) 16-Section format will be used. A preliminary list of specifications is provided.

- Size of the solar field facility
- Acceptable panel, inverter and ancillary component manufacturers
- Grounding requirements
- Safety requirements for interaction with standby power and whether an isolation transformer and/or shunt trip breaker is needed

A draft of the conceptual drawings and performance-based specifications will be submitted for review and comment, with a final version used to facilitate the RFQ process.

Deliverables associated with this task include draft and Final conceptual drawings and performance-based specifications.

3.2.2 Facilitate RFQ Solicitation Process Prepare draft and final RFQ, including advertisement, and scoring criteria. Coordinate with City staff to place advertisements in newspapers. Provide Performance Based Specification to perspective respondents and respond to questions.

Deliverables associated with this task include draft and final RFQ, advertisement, scoring criteria and responses to solicitor questions.

3.2.3 GSC Provider Proposal Review Phase 1 - Qualifications Assist the City in reviewing proposals for GSC solar provider. City staff will review and score proposals selecting up to three (3) providers to advance to second phase of the RFQ process.

EXHIBIT A

Deliverables associated with this task include documentation of scoring criteria and selection of short-listed providers.

3.2.4 GSC Provider Proposal Review Phase 2 - Price Proposal Notify short-listed providers of selection by City and request for GMP proposals based on drawings and specifications, provide template for GMP proposal. Reply to questions via addenda during price proposal phase of solicitation. Assist the City in the reviewing of proposals. City to select provider. Notify selected provider and assist City in executing an agreement with the provider.

Deliverables associated with this task include addenda, documentation of provider selection and final construction agreement.

3.3 Office Construction Services. Provide services throughout construction, including:

3.3.1 Submittals. Review up to five (5) shop drawings and/or product submittals for compliance with the design intent as expressed in the Contract Documents. Costs associated with review of third and subsequent submittals shall be invoiced separately from the other tasks. Costs associated with review of third or subsequent submittals are not included in the compensation set forth in this Agreement for Professional Engineering Services and shall be compensated for as additional services.

Deliverables associated with this task include submittal reviews.

3.3.2 Construction Meetings and Site Visits. Prepare for and attend preconstruction meeting and construction progress meetings led by the Contractor. The scope is based upon one (1) preconstruction meeting. In addition, on-site construction progress meetings will be held monthly for a total of five (5) meetings. The project manager and project engineer will attend all meetings, while discipline leads (Electrical and Instrumentation and Control) will each attend two (2) meetings as determined by project manager. Any comments and observations regarding the construction work shall be given to Lafayette Renew's Resident Project Representative. Contractor to schedule meetings, prepare agendas and prepare meeting notes.

Deliverables associated with this task include site visit observations and reviewing Contractor meeting notes.

3.3.3 Start-up Assistance. Qualified representatives of the Engineer shall assist in the initial field check and start-up services for two (2) eight (8) hour days.

Deliverables associated with this task include site visit observations and participation in start-up.

3.3.4 General Administration. Respond to inquiries from the Contractor and Lafayette Renew relative to interpretation of the drawings and specifications, project schedule, pay applications, change orders and other matters concerning construction. Scope is based upon providing responses for up to four (4) Contractor requests for information (RFIs). Review and monitor the construction schedule prepared by

EXHIBIT A

the Contractor for contract compliance and provide documentation and recommendations to Lafayette Renew concerning the schedule's acceptability. Develop punch list, maintain a log for the status of the punch list activity and issue revisions and updates of the punch list as needed.

Deliverables associated with this task include RFI responses, punch list and other documentation.

3.3.5 Record Drawings. Provide comments on Contractor's drawing submittals to incorporate changes reported by Lafayette Renew's On-Site Project Representative during construction. The Contractors shop drawings will be updated by the Contractor to reflect changes and serve as the record drawings. These record drawings will incorporate changes shown on the Contractor's and the On-Site Project Representative's record sets of drawings, supplementary drawings, shop drawings, and other records of field changes.

Deliverables associated with this task include comments on Contractors Record Drawings. Contractor to provide two full-size (22" x 34") printed sets and one copy of electronic AutoCAD and PDF files of Record Drawings.

EXHIBIT A

Lafayette Renew

Solar Field at Wastewater Treatment Plant

Preliminary List of Specifications

TECHNICAL SPECIFICATIONS

SECTION NUMBER

DIVISION 1 - GENERAL REQUIREMENTS

Summary of Work	01110
Change Order and Work Order Procedures	01250
Payments	01290
Contract Items	01291
Coordination and Meetings	01310
Progress Schedule	01325
Submittals	01330
Operation and Maintenance	01783
Contract Close Out	01789
Training	01820

DIVISION 2 - SITEWORK

Site Clearing	02230
Earth Excavation	02316
Backfilling	02317
Slope Protection and Erosion Control	02370
Landscaping Work	02900

DIVISION 3 - CONCRETE

Concrete Formwork	03100
Concrete Accessories	03150
Concrete Reinforcement	03200
Cast-In-Place Concrete	03310

DIVISION 4 - MASONRY

NOT USED

DIVISION 5 - METALS

Structural Steel	05120
------------------	-------

DIVISION 6 - WOOD AND PLASTICS

NOT USED

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

NOT USED

DIVISION 8 - DOORS AND WINDOWS

NOT USED

EXHIBIT A

DIVISION 9 – FINISHES

NOT USED

DIVISION 10 – SPECIALTIES

NOT USED

DIVISION 11 – EQUIPMENT

NOT USED

DIVISION 12 – FURNISHINGS

NOT USED

DIVISION 13 – SPECIAL CONSTRUCTION

General Requirements	13411
Panels Enclosures and Equipment	13431
Testing	13484
Commissioning	13490
Computer and Network Hardware	13492

DIVISION 14 – CONVEYING SYSTEMS

NOT USED

DIVISION 15 – MECHANICAL

NOT USED

DIVISION 16 – ELECTRICAL

Basic Electrical Materials and Methods	16050
Electrical Requirements for Shop Assembled Equipment	16055
Grounding	16060
Electrical Identification	16075
Electrical Testing Requirements	16080
Short Circuit and Coordination Study	16085
Wire and Cables – 600 Volts and Below	16121
Electrical Raceway Systems	16130
Underground Electrical Distribution System	16132
Wiring Devices	16140
Electric Utility Coordination and Requirements	16210
Photovoltaic Power Supply	16211
Disconnect Switches	16411
Control Components and Devices	16491
Surge Protective Devices	16520

EXHIBIT A

Lafayette Renew

Solar Field at Wastewater Treatment Plant

Preliminary List of Drawings

Sheet No.	Area	Number	Responsible Party	Drawing Name	Conceptual
1	G	1	Civil	Index, Location Map	x
2	G	2	Civil	Legend and General Notes	x
3	G	3	Civil	Site Plan	x
4	E	1	Electrical	Electrical Symbols and Legends	x
5	E	2	Electrical	Power Plan	x
6	E	3	Electrical	One-Line Diagram	x

EXHIBIT B

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

between
CITY OF LAFAYETTE
and
GREELEY AND HANSEN LLC

Estimated Compensation

GAS-POWERED AERATION BLOWER PILOT ASSISTANCE AND SOLAR FIELD AT WWTP

	Hours	Hourly Rates	Cost
1. Greeley and Hansen Labor:			
a. Project Director	18	\$195	\$3,510
b. Project Manager	91	\$140	\$12,740
c. Project Engineer	434	\$125	\$54,250
d. MEPIC	452	\$185	\$83,620
e. Designer / CAD Tech	20	\$125	\$2,500
Subtotal	1,015		\$156,620
2. Other Direct Costs			
a. Local Travel ⁽¹⁾	2,120 Miles @	\$0.585 / mi	\$1,240
Subtotal			\$1,240
3. Total Compensation (Rounded)			\$157,900

⁽¹⁾ Based on 8 trips from Indianapolis at 115 miles per trip and 4 trips from Chicago at 300 miles per trip.

EXHIBIT B

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

between

CITY OF LAFAYETTE

and

GREELEY AND HANSEN LLC

Estimated Level of Effort

GAS-POWERED AERATION BLOWER PILOT ASSISTANCE AND SOLAR FIELD AT WWTP

Task Description	Estimated Workhours						Estimated Compensation	
	Project Director	Project Manager	Project Engineer	Designer / CAD Tech	MEPIC	Total Hours	Totals	
TASK 1 - GENERAL								
<u>1.1 Project Management</u>	2	8	8	0	4	22	\$	3,250
TASK 2 - GAS-POWERED AERATION BLOWER PILOT ASSISTANCE								
<u>2.1 Pilot Blower Start-Up Assistance</u>								
2.1.1 Process	2	6	40	0	0	48	\$	6,230
2.1.2 Electrical	0	0	4	0	24	28	\$	4,940
2.1.3 Instrumentation and Controls	0	0	4	0	30	34	\$	6,050
<u>2.2 Pilot Blower System Performance Documentation</u>								
2.2.1 Natural Gas Usage	0	2	20	0	0	22	\$	2,780
2.2.2 Heat Recovery	0	6	30	0	40	76	\$	11,990
2.2.3 System Performance	0	8	40	0	8	56	\$	7,600
<u>2.3 Progress Meetings</u>	4	20	40	0	8	72	\$	10,060
TASK 3 - SOLAR FIELD AT WWTP								
<u>3.1 Sizing of Solar Field</u>	0	4	16	0	40	60	\$	9,960
<u>3.3 Prepare RFQ for GSC Solar Provider</u>								
3.3.1 Drawings and Specifications	2	8	40	20	100	170	\$	27,510
3.3.2 RFQ Solicitation Facilitation	0	4	24	0	24	52	\$	8,000
3.3.3 GSC Provider Proposal Qualifications Review	0	4	24	0	10	38	\$	5,410
3.3.4 GSC Provider Proposal Price Review	0	4	24	0	10	38	\$	5,410
<u>3.4 Office Construction Services</u>								
3.4.1 Submittal Review	0	1	16	0	60	77	\$	13,240
3.4.2 Construction Meetings and Site Visits	8	12	40	0	30	90	\$	13,790
3.4.3 Start-Up Assistance	0	0	16	0	16	32	\$	4,960
3.4.4 General Administration	0	4	40	0	24	68	\$	10,000
3.4.5 Record Drawings	0	0	8	0	24	32	\$	5,440
Total	18	91	434	20	452	1015	\$	156,620

Exhibit C

GAS-POWERED AERATION BLOWER PILOT ASSISTANCE AND SOLAR FIELD AT WWTP

Project Schedule

City of Lafayette

Gas-Powered Aeration Blower Pilot Assistance Schedule

Milestone	Date
Notice to Proceed	Tuesday, June 28, 2022
Equipment Manufacturing	June 28, 2022 to April 13, 2023
Design Criteria Review Meeting	Thursday, July 21, 2022
Design Criteria Technical Memorandum Due	Thursday, July 28, 2022
Equipment Manufacturing	July 2022 to April 2023
Pre-Installation Meeting	Thursday, April 6, 2023
Equipment Start-Up	Thursday, April 13, 2023
Performance Documentation	April 13 to September 15, 2023
Blower Performance Review and Recommendations Meeting	Thursday, September 21, 2023

Solar Field at WWTP Schedule

Milestone	Date
Notice to Proceed	Tuesday, June 28, 2022
Preparation of RFQ, Drawings and Specifications	June 28 to August 4, 2022
RFQ Solicitation Facilitation	August 4 to August 30, 2022
RFQ Review	September 1 to September 30, 2022
Solar GSC Provider Selection	Tuesday, October 11, 2022
Solar Submittal Review	October 25, 2022 to January 10, 2023
Material Procurement	January 2023 to June 2023
Solar Installation	June 2023 to September 2023